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The Murine Opossums (Genus *Marmosa*) of the West Indies, and the Description of a New Subspecies of *Rhipidomys* from Little Tobago

By George G. Goodwin

MURINE OPOSSUMS

When G. H. H. Tate (1933) revised the murine opossums (genus *Marmosa*), he studied five specimens from Tobago and five specimens from Grenada. Tate included *Marmosa tobagi* Thomas and *Marmosa grenadae* Thomas in the synonomy of *Marmosa chapmani* J. A. Allen of Trinidad. However, Tate said that specimens from Grenada and Tobago are slightly smaller than those from Trinidad. Twenty-one specimens collected by Franklin Thurab under the supervision of Mr. Arthur M. Greenhall on Tobago in 1960 include adult males, adult females, and young. This material clarifies the relationship between murine opossums that occur on Trinidad, those on Tobago, and those on Grenada and shows that two species of *Marmosa*, one of which is represented by a new subspecies, occur on Tobago instead of one.

Measurments (in millimeters) are given in the text and table 1.

Capitalized color terms are from Ridgway (1912).

Abbreviations that represent the names of museums from which pecimens have been recorded are:

..M.N.H., the American Museum of Natural History
.M., British Museum (Natural History)
M.C.Z., Museum of Comparative Zoölogy at Harvard College

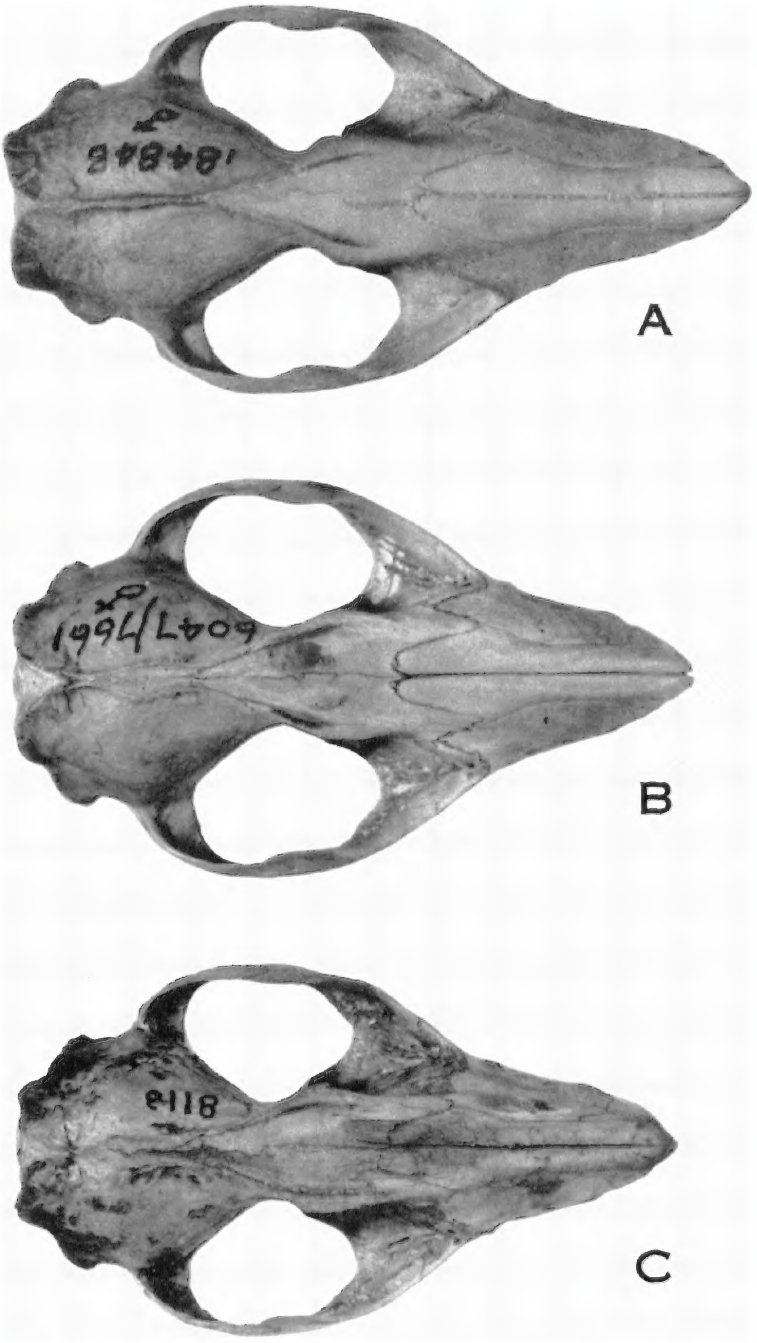

FIG. 1. Dorsal view of cranium. A *Marmosa mitis luridavolta,* type, adult male, A.M.N.H. No. 184848. B. *Marmosa mitis chapmani,* adult male, A.M.N.H. No. 7661/6047. C. *Marmosa mitis grenadae,* adult male, M.C.Z. No. 8113. × 2.

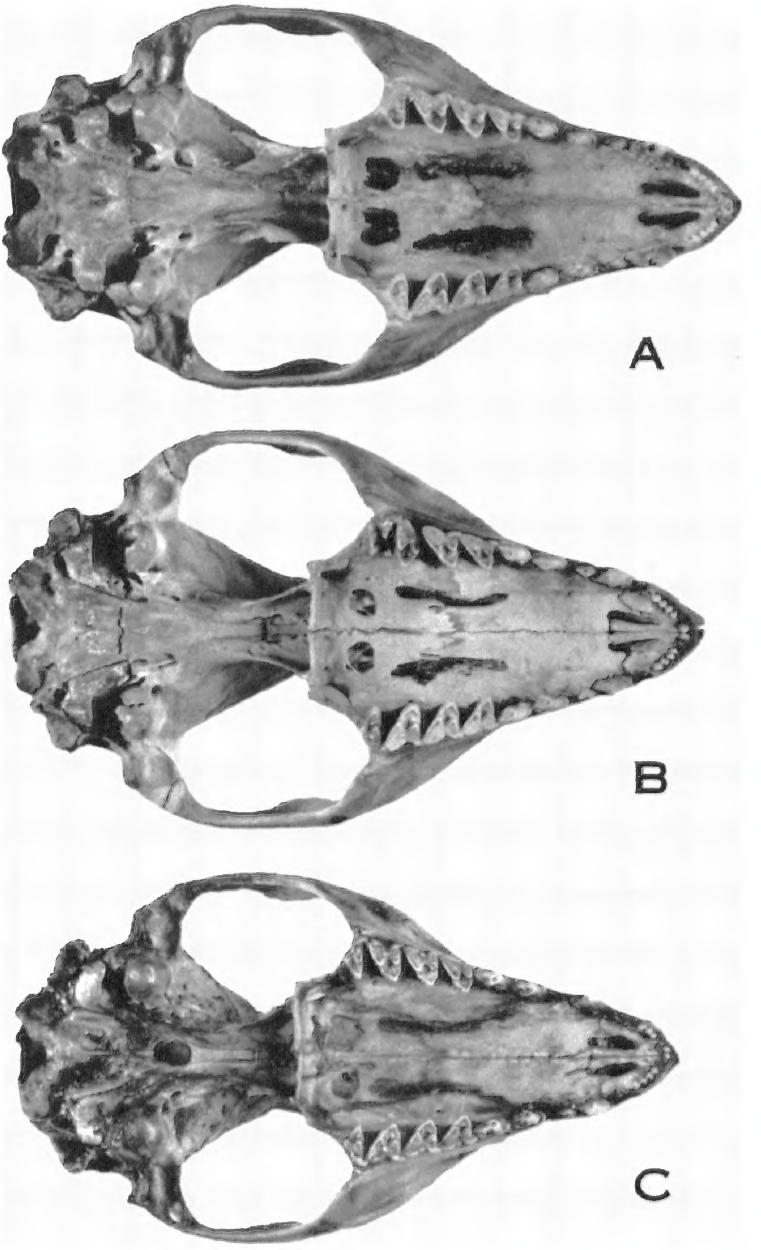

FIG. 2. Ventral view of cranium. A. *Marmosa mitis luridavolta,* type, adult male, A.M.N.H. No. 184848. B. *Marmosa mitis chapmani,* adult male, A.M.N.H. No. 7661/6047. C. *Marmosa mitis grenadae,* adult male, M.C.Z. No. 8133. × 2.

For the loan of material I am indebted to Dr. Barbara Lawrence, Museum of Comparative Zoölogy at Harvard College. Acknowledgment is due to Mr. R. W. Hayman, British Museum (Natural History) for photographs of type skulls. The photographs of the other skulls in this paper were made by Mr. Robert E. Logan, Chief Photographer, the American Museum of Natural History.

Marmosa mitis chapmani J. A. Allen

Figures 1B, 2B, 3C, 4C

Didelphis (Micoureus) murina, J. A. Allen and Chapman, 1893, Bull. Amer. Mus. Nat. Hist., vol. 5, p. 230.

Marmosa murina, J. A. Allen and Chapman, 1897, Bull. Amer. Mus. Nat. Hist., vol. 9, p. 27.

Marmosa chapmani J. A. Allen, 1900, Bull. Amer. Mus. Nat. Hist., vol. 13, p. 197.

Marmosa mitis chapmani, Hershkovitz, 1951, Fieldiana: Zool., vol. 31, no. 47, p. 552.

Type Locality: Caura, head of the Caura Valley, Northern Range, Trinidad, altitude 500 feet.

Distribution: Common and widely distributed in Trinidad.

General Characters: A large, russet-colored subspecies with large ears; tail bicolored, slightly longer than head and body and seen to be finely haired when viewed through a glass; under parts white to roots of hairs; skull short and broad, supraorbital ridges strongly developed, with dorsal grooves; posterior border of nasals rounded; mammae, 7–1–7 = 15.

Description: Pelage dense and woolly; color of upper parts from top of head to base of tail and outer sides of hind limbs between Cinnamon-Brown and Russet; lower sides of body and outer sides of limbs Cinnamon-Buff; eye ring broad and blackish, reduced below eye and extending from base of whiskers backward to base of ear; area between black facial stripes from eyes to base of nostrils clay color; under parts, including inner sides of fore and hind limbs, cheeks, throat, and chin, and upper sides of forefeet and hind feet varying from Ochraceous-Buff to Pale Ochraceous-Buff, the hairs unicolored except on a narrow margin bordering the abdomen where the hairs are dusky at the base; ears and upper side of tail Dresden Brown; under side of tail whitish, the line of demarcation between dorsal and ventral colors not sharply defined. Skull large, short, and broad, zygomatic arches widely spread, rostrum short and broad; postorbital constriction narrow; supraorbital ridges thickened and having a pronounced groove on dorsal surface along inner border, angularly projecting over orbits but not forming

postorbital processes, extending posteriorly in two converging lines across parietals but not quite uniting into a sagittal crest; palate wide; posterior palatine fenestra long and broad; accessory pair of round vacuities near posterior margin of palate.

MEASUREMENTS: Of the holotype (an adult male), cited first; those of an adult female topotype, second; total length, 376, 348; length of tail, 201, 195; hind foot, 26, 22; greatest length of skull, 41.5, 37.0; condylobasal length, 40.6, 36.0; zygomatic breadth, 23.0, 21.4; palatal length, 22.9, 17.0; molar tooth row, M^1–M^3, 6.6, 6.2; maxillary tooth row, C–M^4, 16.6, 15.2.

SPECIMENS EXAMINED: All in the American Museum of Natural History and all from Trinidad: Caparo, five; Caura, nine; Princestown, 12; Heights of Oropuche, three; Sangre Grande, two skulls.

Marmosa mitis luridavolta, new subspecies

Figures 1A, 2A, 3A, 4A

TYPE: A.M.N.H. No. 184848, adult male, Speyside, Tobago, the West Indies; collector, Franklin Thurab, laboratory assistant of the Public Health Department, Port-of-Spain, Trinidad; original no. 33; March 19, 1960. The skin is in good condition, and the skull is complete.

DISTRIBUTION: Tobago, known only from Speyside, eastern Tobago, 2 miles inland from Tyrrel's Bay.

DIAGNOSIS: Size large; color buffy; facial marking strongly differentiated; ratio of length of head and body to length of tail, 93 per cent; tail bicolored and finely haired; skull long and narrow, zygomatic arches not strongly bowed outward, braincase small and elongate; supraorbital ridges thickened; palate long and narrow; pelage close and thin; mammae, 7–1–7 = 15.

COLOR: Upper parts near Tawny-Olive, the hair slaty from base for about half of its length, followed by a broad band of Pinkish Buff and finely tipped with Snuff Brown; color of upper parts grading to near Cinnamon-Buff on rump and outer sides of hind limbs and grading to clear Pinkish Buff on lower sides of body and outer sides of fore limbs; front of head from behind eyes to base of nostrils Pale Pinkish Buff to base of hairs; eye rings black and broad, extending from base of whiskers to halfway between eye and ear; cheeks and sides of head Pale Pinkish Buff; postauricular areas clear Cinnamon-Buff; ears and upper side of tail Dresden Brown; under side of tail and forefeet and hind feet white; the line of demarcation between dorsal and ventral colors of tail not sharply defined; under parts, including chin, throat, and inner sides of fore limbs and hind limbs, Pale Pinkish Buff to base

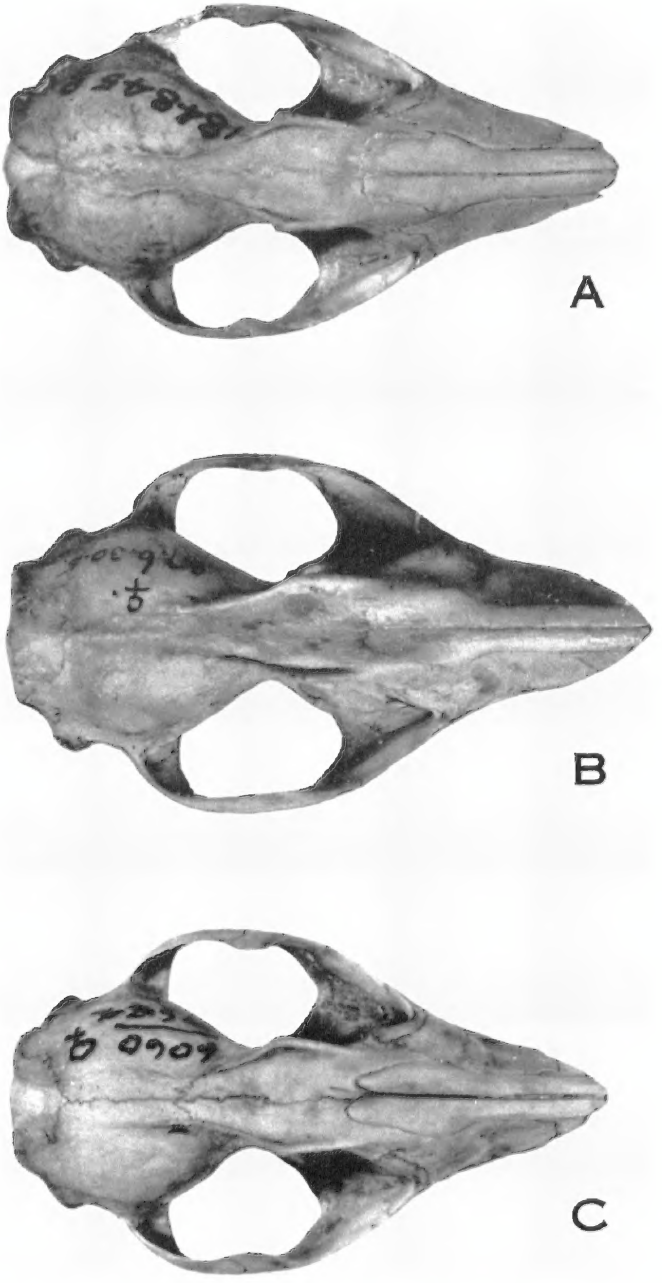

FIG. 3. Dorsal view of cranium. A. *Marmosa mitis luridavolta,* adult female, A.M.N.H. No. 184845. B. *Marmosa mitis grenadae,* type, adult female, B.M. No. 87.6.30.5. C. *Marmosa mitis chapmani,* adult female, A.M.N.H. No. 6060/7664. × 2.

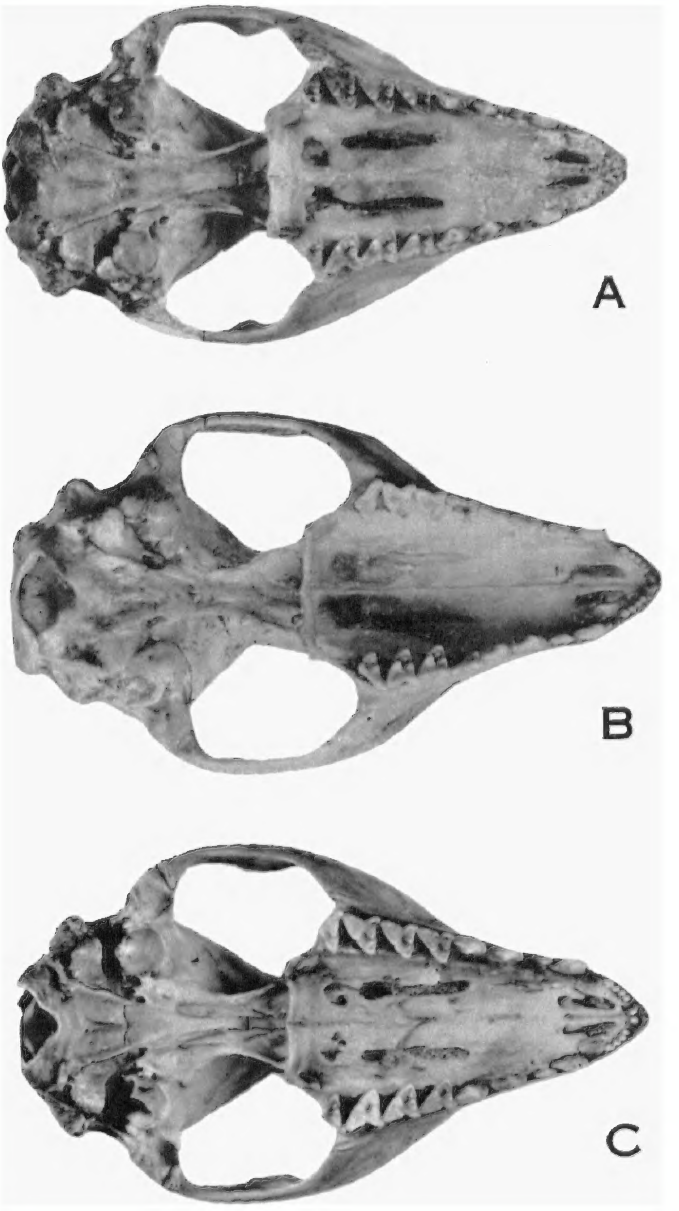

FIG. 4. Ventral view of cranium. A. *Marmosa mitis luridavolta,* adult female, A.M.N.H. No. 184845. B. *Marmosa mitis grenadae,* type, adult female, B.M. No. 87.6.30.5. C. *Marmosa mitis chapmani,* adult female, A.M.N.H. No. 6060/7674. × 2.

of hairs, except for a narrow margin on each side of abdomen where the hairs are dusky at base.

ADDITIONAL CRANIAL CHARACTERS: Rostrum long, supraorbital ridges having a pronounced groove on dorsal surface along inner border, projecting angularly over orbits to form slight postorbital processes, and converging posteriorly over parietals into a low sagittal crest; palate long and narrow; posterior border of nasals rounded; posterior palatine fenestra long and narrow; posterior palatine vacuities square and close to posterior margin of palate.

MEASUREMENTS: Of the type of *Marmosa mitis luridavolta* and, in parentheses for comparison, of the largest male of 25 adult specimens of *M. m. chapmani* from Trinidad: total length, 415 (395); length of tail, 210 (205); hind foot, 27 (26); greatest length of skull, 44.2 (41.6); condylobasal length, 43.3 (41.0); zygomatic breadth, 23.4 (24.5); postorbital constriction, 5.4 (5.9); mastoid breadth, 15.0 (15.1); length of nasals, 20.4 (18.5); palatal length, 24.3 (23.0); width of palate across M^4–M^4, 13.9 (14.3); cranial depth, 13.3 (13.1); width across supraorbital ridges, 7.5 (7.6); molar tooth row, M^1–M^4, 7.8 (7.7); maxillary tooth row, C–M^4, 17.3 (16.0); mandibular tooth row, C–M_4, 16.7 (17.6).

SPECIMENS EXAMINED: All in the American Museum of Natural History and all from Speyside, Tobago: three adult males, one adult female, and six young.

COMPARISONS: In comparison with *Marmosa tobagi, Marmosa mitis luridavolta* is larger and paler, has a much shorter tail that is bicolored instead of unicolored, has mammae 7–1–7 instead of 4–1–4, and differs in cranial characters. Compared with *M. M. chapmani* from Trinidad, *M. m. luridavolta* is larger, has a longer tail, has less woolly pelage, is buffy instead of russet, has greater contrast between the pale face and the top of the head, a skull that is longer and narrower, a rostrum that is longer, a palate that is narrower, and tooth rows that are longer and less converging anteriorly.

Marmosa mitis grenadae Thomas

Figures 1C, 2C, 3B, 4B

Marmosa grenadae THOMAS, 1911, Ann. Mag. Nat. Hist., ser. 8, vol. 7, p. 514.
Marmosa chapmani, G. M. ALLEN, 1911, Bull. Mus. Comp. Zoöl., vol. 54, p. 195.

TYPE LOCALITY: Annandale, Grenada, the West Indies.

DISTRIBUTION: Grenada, recorded from Annandale, Grand Etang, and St. George, and said by G. M. Allen (1911) to occur on Carriacou and Isle of Ronde.

GENERAL CHARACTERS: A large, pale buffy subspecies of the *Marmosa*

mitis group, similar in general characters to *M. m. chapmani* from Trinidad but paler in color, longer tailed, and having a smaller skull and shorter rostrum. Females are very little smaller than males.

DESCRIPTION: General color of upper parts uniform Cinnamon-Buff, scarcely paler on face than back; under parts, including inner sides of fore limbs and hind limbs, creamy white to roots of hairs; black eye ring extended forward to base of whiskers and extended backward to a point halfway between eye and ear; tail indistinctly bicolored; ears and upper side of tail Dresden Brown; under side of tail dull brownish gray; forefeet and hind feet yellowish white. Skull large but smaller than that of *M. m. chapmani;* rostrum short; palate short; tooth rows converging strongly anteriorly; palatal fenestra broad, in some specimens with a thin, unbroken, ossified covering; supraorbital ridges thickened and projecting slightly over orbits.

MEASUREMENTS: Of the type (an adult female) and an adult male from Grand Etang: total length, 302, 370; length of tail, 174, 202; hind foot, 21.5, 24.5; greatest length of skull, 38.8, 39.7; condylobasal length, 38.0, 39.0; zygomatic breadth, 21.0, 22.6; palatal length, 21.6, 22.5; molar tooth row M^1–M^3, 6.2,6.5; maxillary tooth row, C–M^4,—, 15.6.

SPECIMENS EXAMINED: All from Grenada: Grand Etang, one male with worn teeth (M.C.Z.); St. George, one skin and incomplete skull (M.C.Z.).

Marmosa murina tobagi Thomas

Figures 5, 6

Marmosa tobagi THOMAS, 1911, Ann. Mag. Nat. Hist., ser. 8, vol. 7, p. 515.
Marmosa chapmani, TATE, 1933, Bull. Amer. Mus. Nat. Hist., vol. 64, p. 119.

TYPE LOCALITY: Waterloo, Tobago, the West Indies, a small settlement on the north side of the island, inland from Castara, St. David Parish.

DISTRIBUTION: Tobago: recorded from Waterloo and Speyside.

GENERAL CHARACTERS: A small, dark reddish brown *Marmosa* of the *M. murina* group having a very long, unicolored, naked tail; sharply defined facial markings; and basal color of hair on under parts dusky. Skull narrow, slender; supraorbital ridges strongly developed; palatal fenestra indistinctly defined; skull constricted in postorbital region; posterior border of nasals emarginate. Mammae, 4–1–4 = 9.

DESCRIPTION: Color of upper parts Snuff Brown, this color extending down on outer sides of fore limbs and hind limbs to slightly beyond ankles and wrists; eye ring black, extending in a broad line from base of

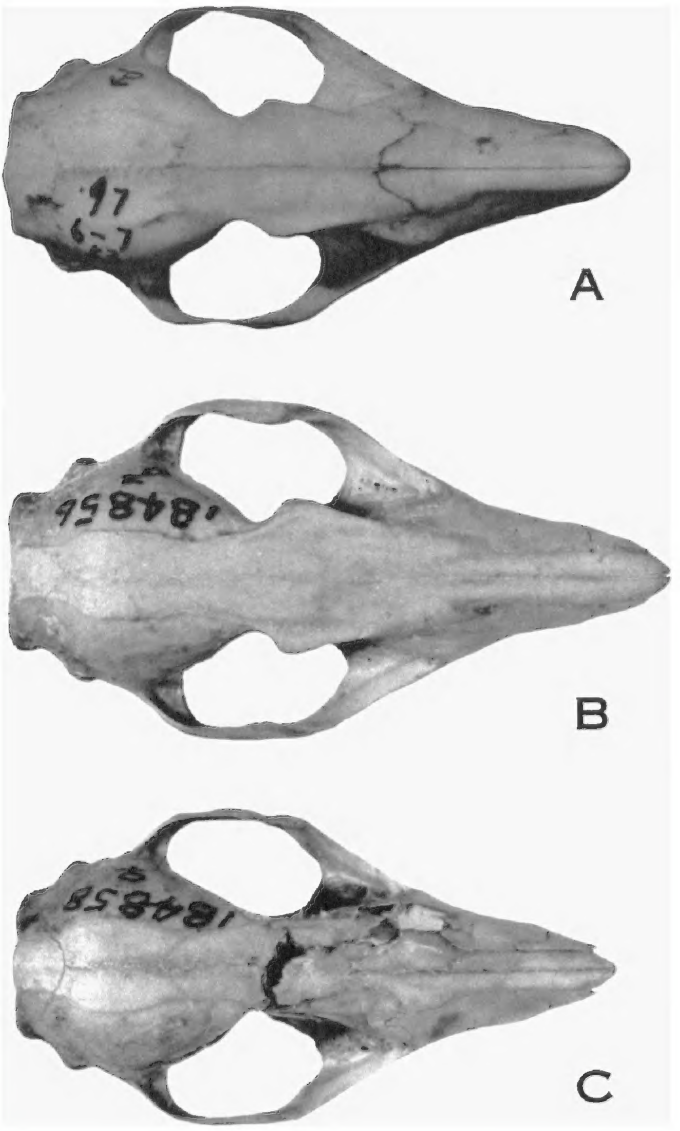

FIG. 5. Dorsal view of cranium. A. *Marmosa murina tobagi,* type, adult male, B.M. No. 97.6.7.53. B. *Marmosa murina tobagi,* adult male, A.M.N.H. No. 184856. C. *Marmosa murina tobagi,* adult female, A.M.N.H. No. 184858. × 2.

whiskers backward to posterior margin of eye; front of face between black facial stripes and from base of nostrils to between eyes Cinnamon-Buff; cheeks, chin, under side of neck, and chest Pale Pinkish Buff to base of hairs; under parts of body, including inner sides of fore

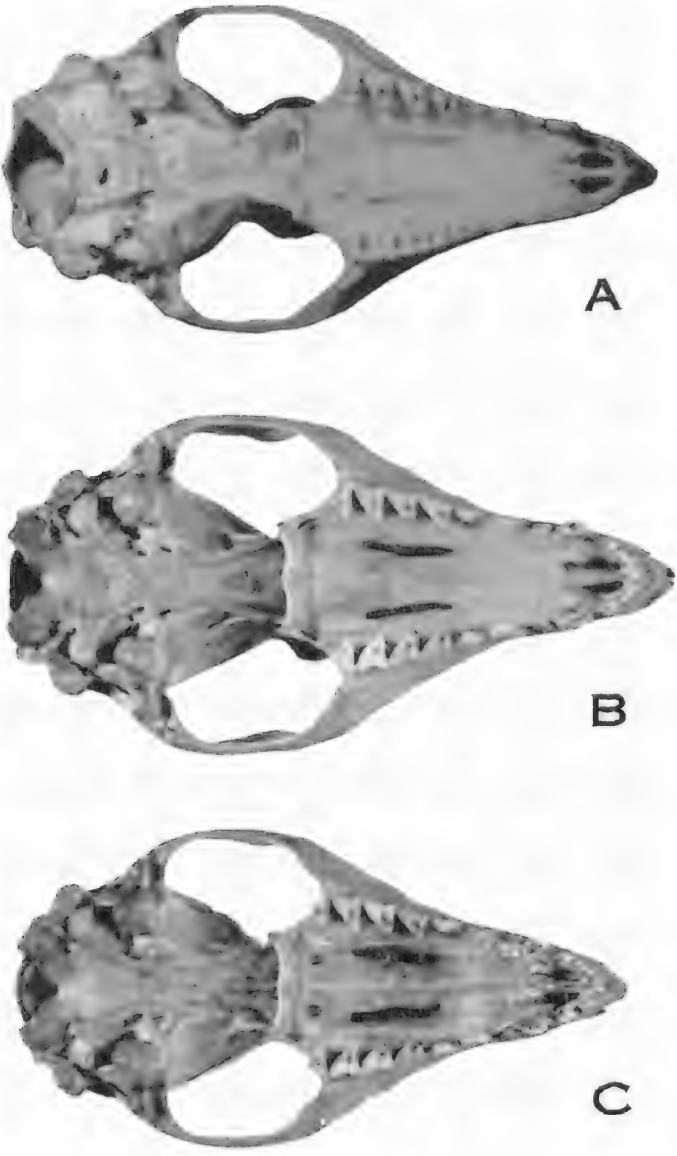

FIG. 6. Ventral view of cranium. A. *Marmosa murina tobagi,* type, adult male, B.M. No. 97.6.7.53. B. *Marmosa murina tobagi,* adult male, A.M.N.H. No. 184856. C. *Marmosa murina tobagi,* adult female, A.M.N.H. No. 184858. × 2.

limbs and hind limbs, Pinkish Buff, the hairs slaty gray from base for two-thirds of their length and tipped with Pinkish Buff; forefeet and hind feet whitish; ears and tail Dresden Brown. Skull small and slender; rostrum elongate and evenly tapered anteriorly; zygomatic arches

TABLE 1

MEASUREMENTS (IN MILLIMETERS) OF *Marmosa* OF THE WEST INDIES

Specimen and Number	Locality	Sex and Age	Total Length	Length of Tail	Hind Foot	Greatest Length of Skull	Condylobasal Length	Zygomatic Breadth	Postorbital Constriction	Length of Nasals	Palatal Length	Width of Palate Across M^4–M^4	Maxillary Tooth Row, M^1–M^3	Maxillary Tooth Row, C–M^4	Mandibular Tooth Row, C–M_4
M. m. chapmani															
	TRINIDAD														
A.M.N.H. No. 7666/6052[a]	Caura	♂ ad	376	201	26.0	41.5	40.6	23.0	6.2	19.3	22.9	14.5	6.6	16.6	17.0
A.M.N.H. No. 7661/6047	Caparo	♂ ad	395	205	26.0	41.6	41.0	24.5	5.9	18.5	23.0	14.3	6.5	16.0	16.7
A.M.N.H. No. 7674/6060	Caura	♀ ad	348	195	22.0	37.0	36.0	21.4	6.0	16.7	20.0	13.0	6.2	15.2	16.0
A.M.N.H. No. 7676/6062	Caura	♀ ad	320	165	21.0	36.6	36.0	20.7	6.5	16.5	20.0	12.6	6.5	15.0	15.8
M. m. luridavolta															
	TOBAGO														
A.M.N.H. No. 184848[a]	Speyside	♂ ad	415	210	27.0	44.6	43.3	23.4	5.4	20.4	24.3	13.9	6.7	17.3	17.6
A.M.N.H. No. 184856	Speyside	♂ ad	400	210	30.0	43.2	42.0	23.0	5.6	19.5	23.7	14.2	6.5	17.0	17.6
A.M.N.H. No.184845	Speyside	♀ ad	330	175	25.0	37.5	36.5	20.5	6.0	16.9	21.0	12.5	6.5	15.3	15.8
M. m. grenadae															
	GRENADA														
M.C.Z. No. 8113	Grand Etang	♂ ad	370	207	24.5	39.8	39.0	22.6	5.9	18.5	22.5	13.8	6.3	15.6	16.2
M.C.Z. No. 6121	Grand Etang	♂ ad	350	185	23.0	—	—	—	—	—	—	—	6.4	15.5	16.4

TABLE 1— (*Continued*)

Specimen and Number	Locality	Sex and Age	Total Length	Length of Tail	Hind Foot	Greatest Length of Skull	Condylobasal Length	Zygomatic Breadth	Postorbital Constriction	Length of Nasals	Palatal Length	Width of Palate Across M^4–M^4	Maxillary Tooth Row, M^1–M^3	Maxillary Tooth Row, C–M^4	Mandibular Tooth Row, C–M_4
B.M. No. 87.6.30.5[a]	Annandale	♀ ad	302	174	21.3	38.8	38.0	21.8	5.8	18.0	21.6	12.3	6.3	—	—
B.M. No. 87.6.30.6	Annandale	♀ ad	—	—	—	36.9	—	21.5	5.9	16.5	20.4	12.6	6.3	—	—
M. m. tobagi															
	Tobago														
B.M. No. 97.6.7.53[a]	Waterloo	♂ ad	330	195	22.0	—	37.5	20.0	6.7	16.0	21.0	11.6	6.1	—	—
A.M.N.H. No. 184854	Speyside	♂ ad	370	210	21.0	39.9	39.4	21.3	5.5	17.6	22.7	12.4	6.0	15.0	16.0
A.M.N.H No. 184856	Speyside	♂ ad	360	210	23.0	39.5	38.5	20.4	6.3	14.4	22.7	11.5	5.8	15.2	16.0
A.M.N.H. No. 184858	Speyside	♀ ad	340	190	21.0	36.5	35.5	19.2	5.6	16.3	20.8	11.2	6.0	14.2	14.9
M. f. carri															
	Trinidad														
A.M.N.H. No. 7314/5922[a]	Caparo	♂ ad	315	175	22.0	37.0	36.3	19.0	6.2	17.6	20.0	11.0	6.3	15.2	16.1
A.M.N.H. No. 7315/5923	Caura	♂ ad	310	170	20.0	37.8	37.3	19.3	6.4	18.3	20.8	10.9	6.3	15.5	16.6
A.M.N.H. No. 7313/5921	Caparo	♀ ad	275	146	16.0	33.2	32.3	16.0	6.3	14.6	18.3	10.5	6.0	14.0	14.7

[a] Types.

not strongly extended laterally; palate long and narrow; inner margins of teeth parallel; supraorbital ridges thickened and projecting in angular processes over orbits and extending posteriorly in parallel lines across parietals; palate long and narrow; palatal fenestra narrow, in some specimens covered with a thin ossified structure.

SPECIMENS EXAMINED: All in the American Museum of Natural History and all from Speyside, Tobago: four adult males, one adult female, five less than half-grown young, six nursing young.

REMARKS: Specimens of *Marmosa tobagi* resemble specimens of *Marmosa murina* from Brazil, differing principally in size.

Marmosa fuscata carri (J. A. Allen and Chapman)

Figure 7

Tylomis carri J. A. ALLEN AND CHAPMAN, 1897, Bull. Amer. Mus. Nat. Hist., vol. 9, p. 27.

Marmosa carri, TROUESSART, 1905, Catalogus mammalium tam viventium quam fossilium, suppl., p. 856.

TYPE LOCALITY: Caparo (a cacao plantation in the north central lowlands), Trinidad, the West Indies.

RANGE: Trinidad; not common anywhere on the island.

GENERAL CHARACTERS: A small, dusky-colored *Marmosa* of the *M. fuscata* group having fur short and soft; facial markings not sharply defined; and tail naked, indistinctly bicolored, and slightly longer than head and body. Skull long and narrow; rostrum long; interorbital region smoothly rounded, without supraorbital ridges; palatal fenestra well developed, small vacuities present near posterior border of palate; mammae, 4–1–4 = 9.

DESCRIPTION: Upper parts, top of head, and outer sides of fore limbs and hind limbs a uniform Snuff Brown; Mummy Brown eye ring narrow and extending from base of whiskers to posterior margin of eye; cheeks and sides of head same color as back; front of head between eyes paler than back; hairs of chin white to roots; under parts and inner side of fore limbs and hind limbs silvery white and having the dark basal color of the hair showing through; ears and upper side of tail Mummy Brown; under side of tail whitish. Skull small, elongate; rostrum long and narrow anteriorly; supraobital region smoothly rounded; skull not constricted in postorbital region; palate narrow; palatal fenestra short and narrow, small posterior vacuities near posterior border of palate present or absent.

SPECIMENS EXAMINED: All in the American Museum of Natural History and all from Trinidad: Caparo, two adult males and one female

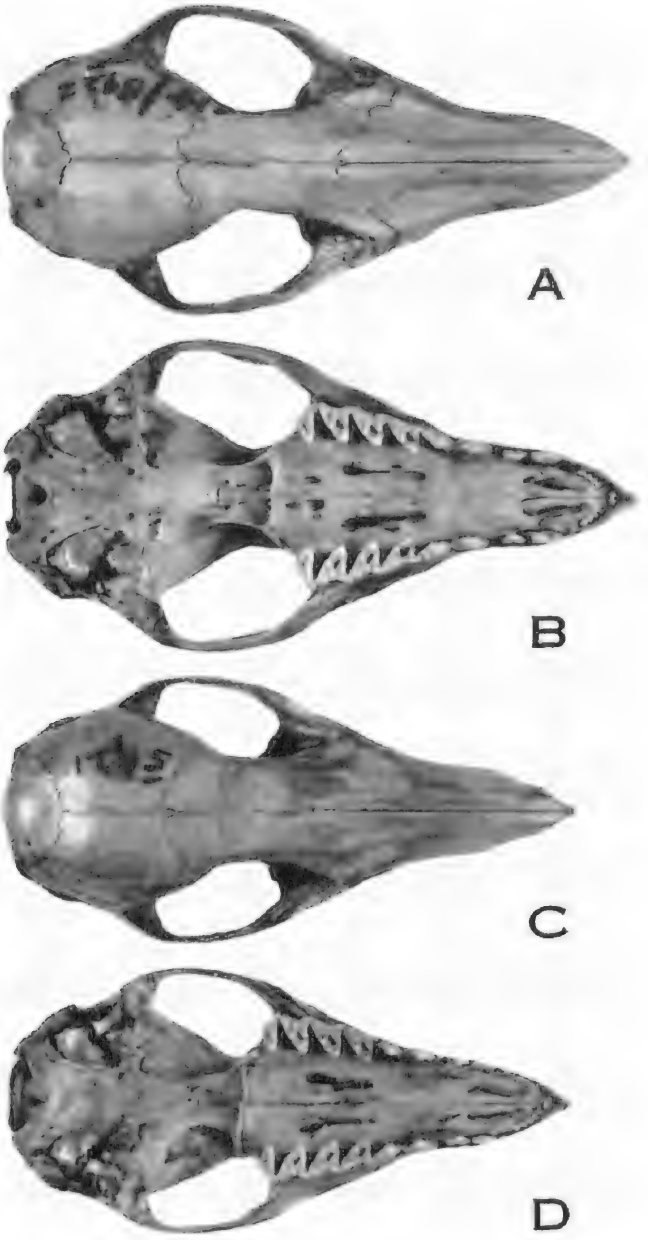

FIG. 7. A. Dorsal view of cranium, *Marmosa fuscata carri,* type, adult male, A.M.N.H. No. 7314/5922. B. Ventral view of cranium, *Marmosa fuscata carri,* type, A.M.N.H. No. 7314/5922. C. Dorsal view of cranium, *Marmosa fuscata carri,* subadult female, A.M.N.H. No. 7313/5921. D. Ventral view of cranium, *Marmosa fuscata carri,* subadult female, A.M.N.H. No. 7313/5921. × 2.

subadult; Cumaca, two skins only, sex unknown; St. Augustine, one adult male; Sangre Grande, one skull, adult male; Arima, one skull, adult male.

KEY TO THE MURINE OPOSSUMS OF THE WEST INDIES

1. Total length from 275 in females to 315 in males; skull with no trace of a postorbital constriction or supraorbital ridges ..... *Marmosa fuscata carri*
   Total length from 302 in females to 415 in males; postorbital constriction and supraorbital ridges strongly developed 2
2. Length of head and body from 71 to 75 per cent of the length of tail; tail unicolored, naked; postorbital processes angular and extended over orbits; supraorbital ridges not grooved on dorsal surface ..... *Marmosa murina tobagi*
   Length of head and body about 95 per cent of the length of tail; tail bicolored, hairy; supraorbital ridges not forming postorbital processes over orbits and strongly grooved on dorsal surface 3
3. Total length from 330 in females to 415 in males; color buffy, colors of facial markings strongly contrasted; skull long and narrow. *Marmosa mitis luridavolta*
   Total length from 302 in females to 395 in males; colors of facial markings not strongly contrasted; skull short and broad 4
4. Total length from 320 in females to 395 in males; color Russet ..... *Marmosa mitis chapmani*
   Total length from 302 in females to 370 in males; color Pale Buff ..... *Marmosa mitis grenadae*

TREE RAT

When E. Thomas Gilliard visited Little Tobago in 1958 to study the birds of paradise on the island, native boys collected specimens of mammals and reptiles for him. Two of the specimens preserved in spirits represent a new subspecies of *Rhipidomys*. This is the first record of a native terrestrial mammal for Little Tobago and the first record of the *nitela* group of *Rhipidomys* for the West Indies.

I am indebted to Mr. Philip Hershkovitz for examining the specimens and for the benefit of his valued opinion.

Rhipidomys nitela tobagi, new subspecies

Figures 8–10

TYPE: A.M.N.H. No. 184555, adult male, from Little Tobago, the West Indies; collected by E. Thomas Gilliard between February 23 and March 19, 1958; skin preserved in spirits and in poor condition; skull complete, molar teeth slightly worn. In addition to the type, there is one subadult male topotype.

DIAGNOSIS: A *Rhipidomys* of medium size, resembling *R. n. milleri* J. A. Allen from the lower Essequibo River region, British Guiana, but

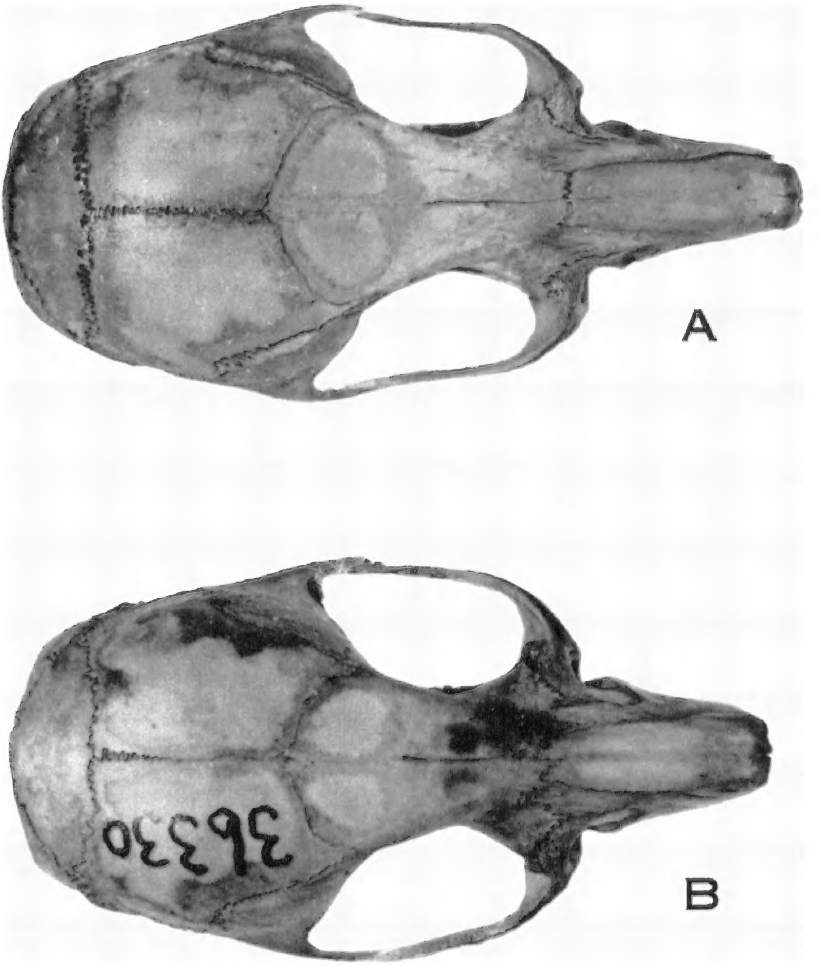

FIG. 8. Dorsal view of cranium. A. *Rhipidomys nitela tobagi,* type, adult male, A.M.N.H. No. 184555. B. *Rhipidomys nitela milleri,* topotype, adult male, A.M.N.H. No. 36330. × 3.

darker and having the skull narrower and more delicately built; the rostrum longer and narrower; the brain case longer, narrower, and more elevated above the rostrum; and the bullae larger. Supraorbital edges (of *tobagi*) straight and not heavily ridged; anterior palatine foramina large, widely open, and extending posteriorly to the level of a line across the anterior borders of the first molars; nasals long and slender but not extending posteriorly to posterior border of premaxillae; rostrum strongly tapered to a narrow tip.

COLOR: Upper parts Cinnamon Brown; under parts including chin,

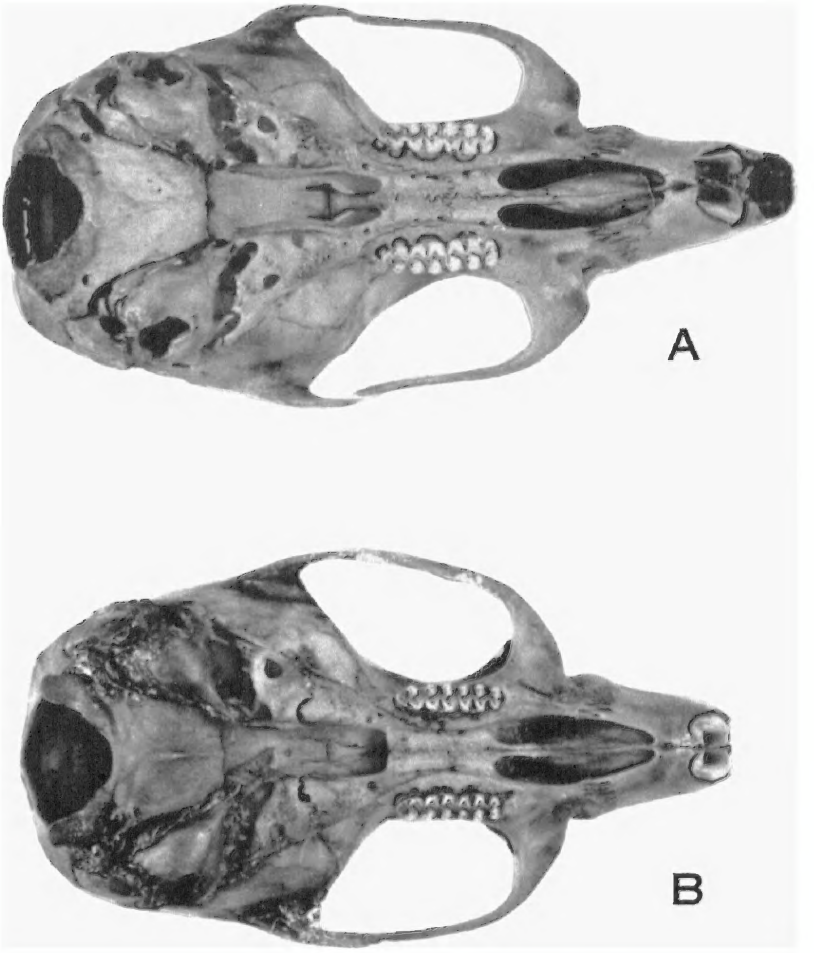

FIG. 9. Ventral view of cranium. A. *Rhipidomys nitela tobagi,* type, adult male, A.M.N.H. No. 184555. B. *Rhipidomys nitela milleri,* topotype, adult male, A.M.N.H. No. 36330. × 3.

throat, and inner sides of fore limbs, white to roots of hairs; anal region and inner sides of hind limbs blackish brown; tail unicolored blackish brown; upper sides of hind feet dark brown; forefeet and all toes white.

MEASUREMENTS: Of the type of *Rhipidomys nitela tobagi,* with those of the type (an old male), an adult male topotype, and an adult female topotype of *R. n. milleri* for comparison: total length, 270 (295, 227, 290); length of tail, 145 (155, 150, 153); hind foot, 25 (25, 25, 24); greatest length of skull, 31.0 (29.8, 28.8, 28.8); condylobasal length, 28

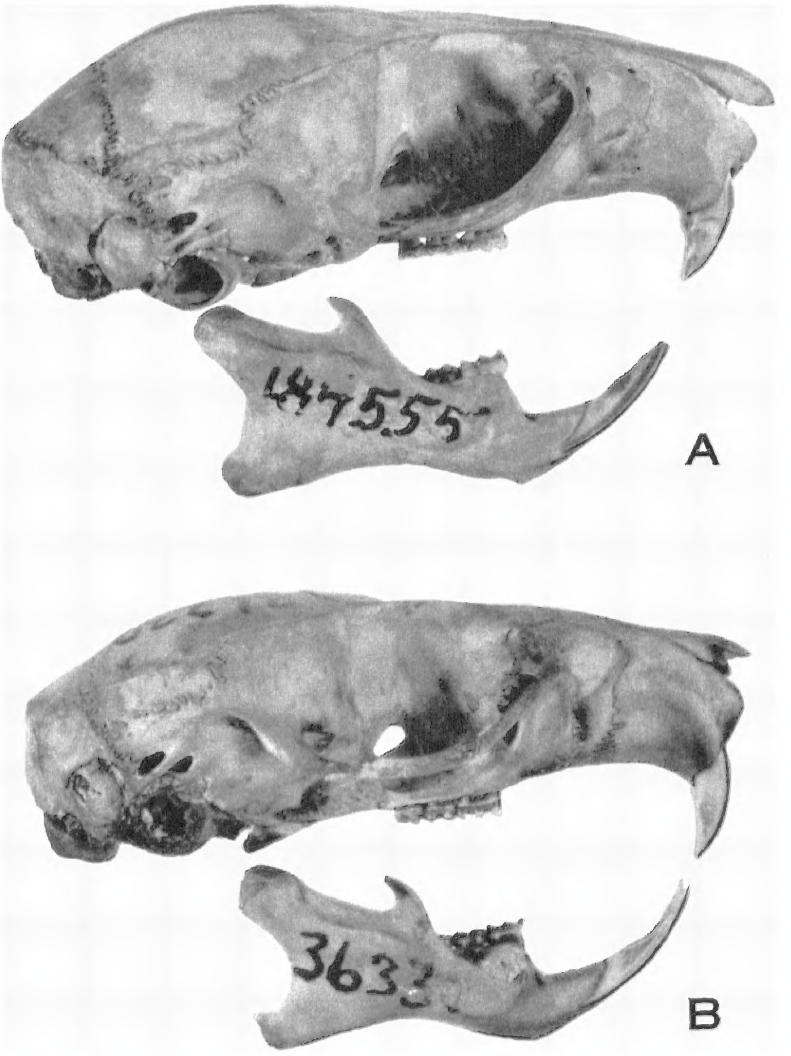

FIG. 10. Lateral view of skull. A. *Rhipidomys nitela tobagi,* type, adult male, A.M.N.H. No. 184555. B. *Rhipidomys nitela milleri,* topotype, adult male, A.M.N.H. No. 36330. × 3.

(28.9, 27.1, 27.0); zygomatic breadth, 15.6 (16.0, 15.6, 15.7); least interorbital width, 4.9 (4.8, 5.0, 4.8); breadth of braincase behind zygomatic arches, 13.2 (13.5, 13.5, 13.6); width of rostrum over roots of upper incisors, 4.2 (4.5, 4.8, 5.0); mastoid breadth, 12.2 (12.3, 12.0, 12.1); length of palatal bridge, 4.5 (4.2, 4.4, 4.2); width of palate across M^2–M^2, 5.5 (5.8, 5.5, 5.7); length of nasals, 9.0 (9.5, 8.5, 9.1); depth of

cranium, 12.5 (10.3, 10.9, 10.5); maxillary tooth row, 4.5 (4.4, 4.3, 4.2).

COMPARISONS: *Rhipidomys n. tobagi* is smaller than and does not need close comparison with *R. venezuelae yuruanus* J. A. Allen from Venezuela, *R. emiliae* J. A. Allen from Brazil, or *R. couesi* J. A. Allen from Trinidad. *Rhipidomys tenuicauda* J. A. Allen from Venezuela is brighter and smaller than *R. n. tobagi. Rhipidomys n. tobagi* is closest in size and general character to *R. n. milleri,* and the differences given in the diagnosis are not more than subspecific. *Rhipidomys milleri* J. A. Allen has been included by some authors in the synonymy of *Rhipidomys nitela* Thomas from the Kanuku Mountains in British Guiana.

REMARKS: The type, the topotype, and a local bat, all collected at the same time, have little or no fur. All three specimens have the appearance of being waterlogged and may have been drowned, possibly in a fresh-water tank. The container in which these specimens were preserved was labeled "Little Tobago"; no other information is present with the specimens. Mr. Gilliard visited only two localities on his 1958 trip—Little Tobago and eastern Tobago.

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